

SYSTEM AND METHOD FOR ROBUST TONE DETECTION

Abstract of the Disclosure

A tone detection device is provided which includes a Fourier Transform means for performing a Fourier Transform on an incoming signal. The Fourier Transform means generates a frequency spectrum of the incoming signal. A normalizing means receives the generated frequency spectrum and normalizes the spectrum for magnitude. The normalizing means then generates a normalized frequency spectrum. An integrator means receives the normalized frequency spectrum and generates a mean of the normalized frequency spectrum over time. A comparator means then determines whether the mean of the normalized frequency spectrum exceeds a predetermined threshold value. If so, a signal is generated indicating that a tone is detected. If the mean of the normalized frequency spectrum does not exceed the predetermined threshold value, a signal is generated indicating that no tone is detected.